

**REMARKS**

The present application included claims 1-7, 13, 21, 28-38 and 42, all of which have been rejected. Claims 1, 6, 13, 21 and 28 have been amended. Claims 2-5 have been canceled without prejudice or disclaimer.

Claims 1-6, 13, 21, 28-37 and 42 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. Claims 1-6, 13, 21, 28-37 and 42 also stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Initially, the Applicants respectfully submit that these rejections are moot in view of the claim amendments.

Further, the Office Action states that claims 1-6, 13 and 28-37 are directed to a transponder, but include significant functional limitations of the tracking system. See June 20, 2008 Office Action at pages 2-3. The Applicant notes that what is claimed herein is a novel and non-obvious transponder configuration to be used by tracking electronics to determine position and orientation according to known techniques. The application provides sufficient description to allow one of ordinary skill in the art to make and use the inventions.

Initially, the Office Action has not discerned the identity of “one skilled in the art,” nor explained how and why such a person would not understand the claims or be able to make and use the inventions described within the specification.

Instead, the Office Action bases the rejections under 35 U.S.C. 112, first and second paragraphs, on the notion that “[f]unctional limitations without sufficient structure improper.” See June 20, 2008 Office Action at page 14. Indeed, the Office Action states

that the claims include functional limitations “without sufficient structure to provide the claimed functional limitations.” *See id.* at pages 3-4. However, the Office Action cites no authority for these statements. Further, the Manual of Patent Examining Procedure is clear that “[t]here is nothing wrong with defining some part of an invention in functional terms. **Functional language does not, in and of itself, render a claim improper.**” *See* MPEP at 2173.05(g) (emphasis added).

The Applicant notes that the claims are directed to a transponder (and method) for use in an electromagnetic tracking system, rather than claiming an electromagnetic tracking system. For at least these reasons, the Applicant respectfully requests reconsideration of these rejections under 35 U.S.C. 112, first and second paragraphs.

Claim 21, 28-29, 32-34 and 42 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,443,066 (“Dumoulin”) in view of U.S. 4,160,971 (“Jones”) or U.S. 6,097,189 (“Arndt”) and U.S. 4,196,418 (“Kip”). Claims 30 and 31 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Dumoulin in view of Jones or Arndt and Kip and U.S. 5,153,583 (“Murdoch”). Claims 1-6, 13 and 35-37 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Dumoulin in view of Jones or Arndt and Kip and U.S. 5,241,923 (“Janning”). The Applicant respectfully traverses these rejections for at least the reasons previously set forth during prosecution and the following:

Claim 1 has been amended to recite, in part, “a coil for transmitting a response signal in response to an excitation signal, wherein a position and orientation of said transponder are determined based at least in part on said response signal; a core around which said coil is wound to contain the turns of said coil, wherein the two ends of said

coil are connected to two terminals attached to said core; a capacitor connected across the two terminals in parallel with said coil; a diode connected across the two terminals in parallel with said coil.” Thus, the claim is clear that the two ends of the coil are connected to two terminals attached to the core, the capacitor is connected across the two terminals attached to the core, and the diode is connected across the two terminals attached to the core. Independent claims 13, 21 and 28 have been amended in a similar fashion.

The Applicant respectfully submits the claim rejections are moot in view of these claim amendments. For example, Jones discloses a “coil 10 and a capacitor 11 [that] form a series resonant circuit 8 coupled across a tunnel diode 12.” *See* Jones at column 4, lines 26-27. However, as shown in Figure 1 of Jones, the diode 12 and the capacitor 11 are not **both** connected across two terminals attached to a core. For at least these reasons, the Applicant respectfully requests reconsideration of the claim rejections.

In general, the Office Action makes various statements regarding the pending claims and the cited references that are now moot in light of the above. Thus, the Applicant will not address such statements at the present time. However, the Applicant expressly reserves the right to challenge such statements in the future should the need arise (e.g., if such statement should become relevant by appearing in a rejection of any current or future claim).

The Applicant respectfully requests reconsideration of the claim rejections for at least the reasons discussed above. If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited to contact the undersigned attorney.

Application No. 10/612,569  
Amendment Under 37 C.F.R. §1.111  
August 20, 2008

The Commissioner is authorized to charge any necessary fees, or credit any overpayment the Deposit Account of GTC, Account No. 07-0845.

Respectfully submitted,

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